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Before the  
**FEDERAL COMMUNICATIONS COMMISSION** JAN - 5 1995  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )

Amendment of Part 90 of the Commission's )  
Rules to Facilitate Future Development of )  
SMR Systems in the 800 MHz Frequency Band )

PR Docket No. 93-144  
RM-8117, RM-8030,  
RM-8029

and

Implementation of Section 309(j) of the )  
Communications Act — )  
Competitive Bidding )  
800 MHz SMR )

PP Docket No. 93-253

To: The Commission

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COMMENTS

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### Summary Of The Filing

All two-way radio communications service is local. The Commission's goal of having a nationwide, seamless, land mobile communications system is within reach, but Major Trading Areas are too large for the purpose of licensing such systems. If the Commission is to maximize the number of able and interested bidders, see an actual increase in spectrum efficiency, and have service concentrated where it is actually required, the Commission should authorize wide area systems on the basis of Basic Trading Areas, rather than MTAs.

To maximize competition, the Commission should take the steps necessary to assure that incumbent SMR operators are able to continue to develop their service to the public. Continued intercategory sharing, including continued availability of the General Category channels for SMR system use, is crucial to the continue availability of traditional SMR service. If the Commission were not careful to preserve expansion opportunities for traditional operators, it would surely see economic decisions made that would decrease the net amount of competition in the land mobile field.

To maximize competition in the field of wide area SMR service, the Commission should facilitate the development of wide area systems on all 800 MHz band channels. By continuing to allow operators on the channels other than the upper 200 channels to develop wide area systems based on the "footprint" outlined by their site-specific facilities, the

Commission will assure that SMR service will develop as fully as possible to meet all of the needs of the public in a fully competitive manner.

The Commission should refrain from imposing mandatory exchanges of frequencies in any manner as between wide area and incumbent licensees. Incumbent licensees exercised the entrepreneurial zeal which the Commission expected of them in its establishment of the SMR service and they are entitled to the full fruits of their labors, including the right, if they so choose, to keep what they have earned. While there may be benefits to wide area operation based on Commission-defined service areas, the benefits should not be obtained at any cost, whatsoever, to incumbent SMR operators who have made vastly expanded, competitive commercial land mobile radio service available to the public.

While Cumulous does not believe that the Commission should permit wide area licensees to impose frequency exchanges on incumbent operators, if the Commission does impose such a requirement, it should be conditioned as fully described in Cumulous's comments.

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COMMENTS

Cumulous Communications Corp. (Cumulous), hereby respectfully files its Comments in the above captioned matter. In support of its position, Cumulous shows the following.

Cumulous, together with affiliated entities, operates a substantial number of SMR systems in the vicinity of Fresno, California. Through its diligent efforts, Cumulous has grown rapidly and has been successful in the operation of traditional trunked and conventional systems. When the time is ripe, Cumulous desires to expand its activities to wide area operations. Accordingly, Cumulous has a base of experience on which to present its comments to the Commission and a belief as to the course which the Commission's regulatory policies should take.

### MTAs Are Not The Best Basis For Wide Area Licensing

The Commission's proposal to authorize wide area systems on the basis of Rand-McNally Major Trading Areas does not appear to be practical for all but a small percentage of the nation's territory. Most of the MTAs are huge. Of immediate concern to Cumulous is the San Francisco MTA, which includes most of northern California and most of the northern half of Nevada. If a person were to define sectors of the nation in terms of the areas within which manufactured products are distributed from a central source, then the MTA boundaries would appear to provide a reasonable means of dividing market areas. The San Francisco MTA appears reasonably to define the area within which manufactured goods are distributed from San Francisco. However, the MTA boundaries do not appear to have any reasonable relationship to the provision of land mobile radio communications service.

Were this proceeding concerned with the allocation of virgin spectrum, then whether the Commission divided territories in the best way possible might be of little significance to the public interest. However, the Commission's flexibility and tolerance for administrative error is narrowed considerably by the existence of thousands of traditional SMR stations. Therefore, the Commission should consider whether some alternative to MTA-based wide area licensing would not better serve the public interest.

Two significant, intertwined problems are presented for the concept of MTA-based wide area licensing in an environment of existing stations. An MTA licensee could have extreme of difficulty in designing a serviceable system in the urban areas which would satisfactorily protect

existing stations. Given a requirement to provide service to a certain minimum percentage of an MTA's area within a certain time, an MTA licensee may have little choice but to waste resources providing service to underpopulated areas, while not being able readily to provide substantial service to the populous part of the MTA.

While the dream of a nationwide, seamless land mobile communications system is certainly within the grasp of the industry, MTA licensing would not serve that goal as well as would an alternative assignment plan. Cumulous suggests that, rather than assigning wide area SMR licenses on the basis of MTAs, the Commission should assign them on the basis of Rand-McNally Basic Trading Areas (BTAs).

The studies which Cumulous has undertaken indicate that operation of a wide area SMR system in its trading area, using the concepts of reduced power and frequency reuse at multiple sites, should result in more cost-effective operation for end users. However, if required to extend wide area operation over too great an area, it appears that wide area operation may have little to offer the public other than a theoretical increase in spectrum efficiency. The word "theoretical" is used because, while reduced power and frequency reuse can make more efficient use of the spectrum possible, if the costs of providing the service to the public in that manner are not competitive, then the potential efficiency will not be realized in practice. Cumulous's studies indicate that the per-user cost of providing service to a mandated portion of an MTA is highly likely to exceed the per-user cost of service to the same percentage of a BTA. Cumulous doubts that service could be provided to the mandated percentage of the San Francisco MTA at

a price which would be competitive with other, existing land mobile communications services. Therefore, it is doubtful whether an MTA-based wide-area service can be made marketable and thereby obtain any of the benefits which flow from increased competition and increased efficiency of spectrum use. To increase the probability that wide area SMR operation will, in fact, increase competition and increase the efficiency of the use of the spectrum, the Commission should reduce the scope of each wide area license from its proposed MTA size to the more practicable Basic Trading Area.

An obvious consideration in the Commission's planning — albeit, not the driving concern — is the success which may be achieved for the public fisc in competitive bidding. Assigning wide area licenses on the basis of BTAs is likely to produce a much larger amount of revenue for the United States Treasury than MTA licensing. It is also likely to result in winning bidders who are happier with their investments and more likely to provide service over their entire territories more quickly.

Cumulous believes that it is typical of many local SMR operators. Cumulous provides traditional service in the Fresno BTA and in the adjoining Visalia-Porterville-Hanford BTA. A high percentage of Cumulous's traffic consists communications in support of agricultural activities and motor truck delivery operations. Cumulous believes that the true nature of the land mobile radio communications business is like politics, which the late Speaker of the House, Thomas P. O'Neill, constantly declared is always local. While the Commission, like the Congress to which it answers, must regulate for a nation, the nature of the land mobile radio



communications service which it regulates is intensely local. In this proceeding the Commission should acknowledge that the goal of a nationwide, seamless commercial land mobile radio communications system will be achieved only by the success of hundreds or thousands of local service operators.

Cumulous desires to provide wide area service to the Fresno and the Visalia-Porterville-Hanford BTAs, but has no interest in providing service either in the San Francisco metropolitan market or in Elko County, Nevada. Cumulous would be willing to engage in spirited bidding for the rights to operate a wide area system in the two BTAs of interest to it, but would not be interested in bidding for the entire San Francisco MTA.

There are some situations in which the whole is exactly equal to the sum of its parts. There are others, known as "synergistic" situations, in which the assets joined together in a large collection are of greater value than the arithmetic sum of the value of the isolated assets. It appears to Cumulous that MTA licensing would present a case of "reverse synergy", as compared to licensing wide area systems on the basis of BTAs. That is, the BTA's, if offered separately, would be of higher value than if the same channels were applied for in MTA-sized blocks. If the Commission provides for licensing on the basis of BTAs, rather than MTAs, Cumulous expects that the public interest will be better served by obtaining more bidders, more personally involved and interested bidders, and a more satisfying result at the end of the bidding process.

### SMR Use Of General Category Channels Should Continue

At paragraphs 51-54 of its Notice of Proposed Rule Making, the Commission presented alternative proposals for intercategory sharing and use of the General Category channels. If the Commission decides to provide for wide area licensing in this proceeding, it should concurrently take steps to provide for the continued, competitive growth of traditional SMR service. To provide for continued growth, the Commission should continue to permit intercategory sharing and permit continued new and modified use of the General Category channels for SMR systems.

Although the Commission proposed to discontinue the licensing of Business and Industrial/Land Transportation channels for SMR use on an intercategory sharing basis, the Commission's proposal was not supported by any evidence that there was any shortage of channels for new Business or Industrial/Land Transportation systems which could be relieved by discontinuing intercategory sharing. The proposal to discontinue intercategory sharing was also not supported by any evidence that the public interest had been harmed in any way by the current program of intercategory sharing. In the absence of such evidence, the Commission would have no reasonable or legally sufficient basis for terminating intercategory sharing.

The Commission's completely contradictory proposals for redirecting use of the General Category channels indicate either such uncertainty that no action at all would be justified at this time, or that, disagreeably, the Commission had contemplated awarding the General Category channels as a "consolation prize" to one part or another of the industry. Because of the large

number of persons interested in the future of the General Category channels, the Commission should move with great care, if it moves at all, in re-regulating the use of those channels.

The Commission's plan for increasing spectrum efficiency by allowing General Category channels to "grow up" from less efficient conventional use to more efficient trunked use has logical merit and a background of experience to support it. Since the time that the Commission permitted the joining of General Category channels to fully loaded trunked systems, the Commission's records show that the industry has responded favorably and strongly to the opportunity and hundreds of trunked systems have been increased in size and spectrum efficiency by the addition of channels from that pool. There is nothing in the Notice of Proposed Rule Making to suggest that there has been any adverse effect on the public interest from the use of General Category channels for SMRs, and nothing to suggest that the public interest would be better served by discontinuing such use. The Commission should continue to allow the migration of the General Category channels to trunked operation, thereby increasing the efficiency of spectrum use and continuing to make competitive opportunities available to traditional SMR operators.

Providing a continuing opportunity for land mobile radio communications service operators to meet the limited needs of some end users for conventional service by the operation of SMR-Conventional stations on the General Category channels is one means by which the Commission can meet its statutory mandate to provide service as broadly as possible, *see*, 47 U.S.C. §151. While there may not be a great many additional opportunities for a vendor to

provide service to a conventional end user, the Commission's proposal did not suggest any factual or reasoned basis for terminating the expansion of that end user choice.

Experience shows that business will leave its money in activities which provide reliable returns, even if the returns are not exceptional in relation to the size of the investment, provided that an opportunity remains to expand the business. However, when the opportunity to expand a generally mature business is foreclosed, experience shows that disinvestment in that business is rapid and complete, stranding customers and the investments which they have made to use the service. Were traditional SMR operators no longer able to look to the General Category channels to provide opportunities for expansion of their service, the Commission should expect to see a net decrease in competition in the SMR industry, as operators move their financial investments to businesses having greater potential. To facilitate a continued, healthy competition in the provision of SMR service, the Commission should continue to facilitate growth of that service by continuing to permit the use of the General Category channels for both conventional and trunked SMR operation.

#### **Wide Area Conversion Of Existing SMR Systems Should Be Facilitated**

The Notice of Proposed Rule Making is somewhat unclear as to whether the Commission would permit wide area operation on the "new SMR" channels (the SMR channels below 861 MHz which the NPRM sometimes refers to as the "lower 80" channels). To maximize competition, the Commission should expressly permit the growth and development of wide area

systems on the new SMR channels, subject to the same co-channel protection requirements that it applies to other SMR systems.

If the Commission determines that authorizing wide area systems on the basis of Commission defined service areas has merit, it should also acknowledge the merit which is to be found in also authorizing wide area systems on the basis of a "footprint" defined by a local service operator. If the Commission provides for licensing of wide area systems on the "old SMR" channels (those above 861 MHz which the NPRM sometimes refers to as the "upper 200 channels"), then it should provide for parity among operators by also permitting a site-specific system on the new SMR and intercategory shared channels to grow and develop into a wide area system, the boundaries of which are defined by the applicant's currently authorized and applied-for stations. In this way, the Commission can provide for maximum competition among the services which the vendors believe that the public will support, and will provide for the highest and best use of all parts of the public spectrum.

While the Commission proposed not to allow any more extended construction periods for stations authorized on the new SMR channels, the NPRM did not provide any reasoned basis for the proposal. If the Commission is to provide for the maximum of competition and the maximum additional new service possible, it should not adopt such a restriction. Instead, it should expressly allow the slower growth and development on the new SMR channels which is required by a wide area system.

### Any Frequency Exchanges Should Be Wholly Voluntary

One difficulty which flows from the concept of authorizing mandatory frequency relocation<sup>1</sup> of traditional systems from the old SMR channels to other channels is that there are no comparably valuable channels, unless the Commission expressly provides for wide area operation on the new SMR channels as well as on the old. To reduce the discrepancy between the value of an old SMR channel and a new SMR channel offered as a replacement, if the Commission adopts any form of involuntary channel swapping, it should take the steps necessary to assure that the same use can ultimately be made of both channels.<sup>2</sup>

Cumulous is strongly opposed to the suggestion that the Commission might create conditions under which an incumbent licensee might be compelled to exchange his channels for channels offered by an MTA licensee. Among Cumulous's reasons are the following:

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<sup>1</sup> Cumulous recognizes that the Commission did not wholeheartedly propose mandatory exchanges of frequencies between traditional and wide-area licensees, however, the Commission also was clearly contemplating the terms under which it might require an incumbent licensee to render up its old SMR channels to an MTA licensee.

<sup>2</sup> To place the problem in a different and only slightly whimsical context, assume that one owns a 1995 model luxury automobile. In trade for that automobile, someone offers an M1A1 Abrams tank. While the tank is admirable piece of rugged transportation machinery and cost much more than the automobile, the automobile owner may be primarily interested in commuter transportation, in which case, the tank is worth nothing to him at all. If the Commission permits an exchange of channels to be forced upon a licensee, then it should assure that the replacement channel is of comparable utility and value.

The incumbent SMR had the entrepreneurial zeal which the Commission had sought in establishing private carriers and developed his old SMR channels. He should be entitled to the full value that a willing buyer will pay him in an arm's length, unforced transaction. Anything less would be a breach of faith between the Commission and those who responded to its invitation to bring new commercial service to end users. If the incumbent licensee believes that his customers can best be served by his continuing to provide them service on the channels which he developed, he should be permitted to continue to exercise his choice and compete with other vendors on that basis.

The Commission and the public are presently blessed with a well-working, if somewhat mature, SMR service. The Commission should not disrupt such a working system in an effort to facilitate a new technical system which has yet to achieve any success by any measure. While Cumulous is convinced of the value of wide area SMR service, it is not at all convinced that wide area service should be forced upon the public at the cost of any disruption of existing, traditional service. If a wide area licensee chooses to uproot its customers from their current frequencies and equipment, that is a choice which the wide area licensee should be permitted to make, but the wide area licensee should not be permitted to disrupt the activities of incumbent licensees in any way.

There is no assurance that any alternative frequencies would be satisfactory for incumbent licensees. While their numbers are diminishing, there are still some mobile units in service which are incapable of tuning to all of the 800 MHz band channels. For channels to be

combined into an antenna, certain mathematical relationships among them must exist. Under the terms of many site leases, only specified equipment can be used, including certain transmitting equipment and specific frequencies. Since there can be no certainty that replacement channels can be used at existing sites under the terms of existing accesses to the sites, there can be no assurance that any channels are in any way reasonably comparable.

Cumulous believes that, for all the foregoing reasons, the Commission should not impose any form of mandatory channel exchange on incumbent SMR operators. However, if the Commission determines that the public interest requires such mandatory exchanges, it should define comparability of facilities in detail. Among the requirements which the Commission should order be met if proffered channels are to be deemed to be reasonable exchanges for old SMR channels are the following:

- 1) The channels should be within the range of 851-861 MHz;<sup>3</sup>
- 2) The channels should be satisfactory for use at the incumbent licensee's existing site using the incumbent licensee's current equipment (except for frequency determining elements) and under the terms of any contractual obligations related to use of the existing site;
- 3) All necessary work to be performed by the incumbent licensee or its designee, with compensation to be paid to the incumbent at the incumbent's regular rates for such work;

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<sup>3</sup> It is rumored within the industry that, since the NPRM did not specify that the replacement channels would have to be in the 800 MHz band, one well-known wide-area operator has planned to offer channels below 800 MHz as purportedly comparable replacement channels.



4) Any necessary equipment, including necessary test equipment, shall be provided by the wide area licensee's providing new equipment at no cost the incumbent licensee.

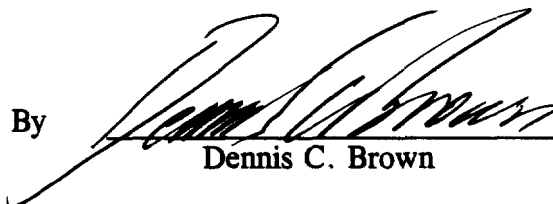
These provisions will help assure that a wide area licensee cannot impose anticompetitive burdens on the incumbent operators and will contribute to the continued availability of competitive SMR service to their customers.

Conclusion

For all the foregoing reasons, Cumulous respectfully requests that the Commission adopt rules consistent with the suggestions contained herein.

Respectfully submitted,  
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